

Appl. No. : 09/077,574
Filed : September 24, 1998

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A composition for administration to an animal, comprising:

an isolated immunogenic heatshock protein of *L. intracellulari* having an amino acid sequence comprising SEQ ID NO:2 in an amount effective to induce a protective an immune response against *L. intracellularia*; and

a pharmaceutically acceptable carrier.

2. **(Previously presented)** The composition according to Claim 1, wherein the composition is formulated for administration to a pig.

3.-11. **(Cancelled)**

12. **(Previously presented)** The composition of Claim 1, wherein the heatshock protein is produced by expression of a nucleic acid having a sequence comprising SEQ ID NO:1.

13.-31. **(Cancelled)**

32. **(Previously presented)** A method for inducing an immune response in an animal against *L. intracellularis* or treating an animal infected by *L. intracellularis*, said method comprising the step of:

administering to said animal an effective amount of the composition of Claim 1 to induce an immune response to *L. intracellularis*.

33. **(Withdrawn)** The method according to Claim 32 wherein the animal is a pig.

34.-36. **(Cancelled)**

37. **(Previously presented)** The method according to Claim 32, wherein said composition further comprises a second peptide or protein, from *L. intracellularis*.

38. **(Cancelled)**

39. **(Previously presented)** The method according to Claim 37, wherein the second peptide or protein is in recombinant form.

40. **(Previously presented)** The method according to Claim 37, wherein the second protein is selected from the group consisting of: a refolding protein, a second heatshock protein, a flagellar basal body rod protein, an S-adenosylmethionine, tRNA ribosyltransferase-isomerase, an autolysin, an enoyl-(acyl-carrier-protein) reductase, and a glucarate transporter.

41.-113. **(Cancelled)**

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114. (Currently amended) The composition of Claim 1, wherein said composition further comprises at least one other polypeptide selected from the group consisting of: SEQ ID NOS: 2, 4, 7, 8, 10, 11, 13, 14, 16-20, and 22-27.

115. (Previously presented) The composition of Claim 1, further comprising at least one other protein, which is encoded by the nucleotide sequence selected from the group consisting of: SEQ ID NOS:3, 5, 6, 9, 12, 15, 21, 28, 29, 30, 31, 32, 33, and 34.

116. (Previously presented) The composition of Claim 1, further comprising at least one other protein from *L. intracellularis*, said protein selected from the group consisting of: a refolding protein, a flagellar basal body rod protein, a second heatshock protein, an S-adenosylmethionine, a tRNA transferase-isomerase, an autolysin, an enoyl-(acyl-carrier-protein) reductase, and a glucarate transporter.